
HP Operations Manager for UNIX

for the management server on the HP Integrity HP-UX 11i v3 system

Release Notes

Software Version: 9.00

Release Notes Publication Date: June 26, 2009

This document provides an overview of the changes made to HP Operations Manager for UNIX (HPOM) version 9.00. It contains important information not included in the manuals or in online help.

The first page of this document contains the version number, which indicates the software version and the publish date, which changes each time the document is updated. To check for recent updates or to verify that you are using the most recent edition, select `Operations Manager for UNIX` at the following location:
<http://support.openview.hp.com/selfsolve/manuals>

This document provides information about the following topics:

- Media Kit Contents
- What's New in this Release
- Integration with Other HP Software Solutions
- Obsolescence Announcements
- Installation Notes
- Known Problems, Limitations, and Workarounds
- Documentation Errata
- Local Language Support
- HP Software Support
- Legal Notices

Media Kit Contents

The HPOM for UNIX media kit contains a number of CDs and DVDs required to install the HPOM for UNIX foundation product and NNM i-series 8.10 for HP-UX. In addition, you receive AlarmPoint Express. AlarmPoint is an interactive alerting application, designed to capture and enrich events and route those events to the right person on any communication device, and give that person the ability to solve, escalate, or enlist others to resolve.

The AlarmPoint integration allows the appropriate technician to be notified directly using voice, email, pager, BlackBerry or other devices. Information about the failure is presented to the event resolver and decisions about how to handle the event can be made in real-time.

NOTE HP only distributes the AlarmPoint Express media, and does not provide support. AlarmPoint Express support and information may be obtained directly from AlarmPoint at <http://express.alarmpoint.com/hp>,

New HPOM customers also receive HP Performance Agent, HP Performance Manager, and HP Reporter.

What's New in this Release

HPOM 9.00 contains new features, feature enhancements and other changes.

New Features

HPOM 9.00 contains the following new features:

Web-based Administration for HPOM for UNIX

HPOM provides a new web-based Administration UI which replaces the Motif UI. The key benefits of the new web-based Administration UI are:

- Web-based configuration of HPOM.
- Concurrent use by multiple administrators with different access rights.
- Improved navigation and editing of HPOM configuration items.
- Policy (template) versioning and comparison capabilities to quickly identify configuration changes and differences.

You can install the Administration UI on the HPOM system after the server installation is complete. HPOM Administration UI user documentation is available online at the Support web site.

New Policy Types

HPOM templates are now referred to as policies, and provide new monitoring capabilities:

- The **Windows Management Interface** (WMI) policy type monitors the properties of WMI classes and instances, and responds when a property matches a value you select, or when an instance you select is created.
- The **Nodeinfo** policy type allows you to configure some aspects of agent behavior, for example, buffer sizes, IP addresses, and port numbers for client-server communication.
- The **Service Process Monitoring** policy type monitors services and processes which are running on managed nodes and sends a message when the state of the service or the process changes.
- The **Measurement Threshold** policy type evaluates performance data and responds if the data does not remain within acceptable levels. This policy type is useful if you want to monitor parameters that are constantly changing, such as CPU load, disk space, number of running processes, and so on. You can also use VB Script or Perl to perform your own calculations and decide if the threshold has been crossed.

Policy Versioning

HPOM 8.xx templates are automatically converted into *policies* when uploaded to HPOM 9.00. Policies serve the same purpose as templates, but policies are versioned. You can assign specific versions of a policy to managed nodes, node groups, or policy groups. You can also roll back to a specific version of a policy, and can distinguish between fixed version, always latest and always latest subversion assignments.

Category-Based Instrumentation Distribution

You can associate instrumentation with policies by using *categories*. This association ensures that the management server automatically deploys instrumentation required by a policy when it deploys that policy. Categories increase your control over which instrumentation is distributed, and to which managed nodes, thus reducing the amount of instrumentation that needs to be distributed.

Category-based instrumentation enhances and replaces the selective distribution concept, which is still available for backward compatibility. Please plan your upgrade to category-based instrumentation, since selective distribution will be deprecated.

Policy and Instrumentation Compatibility

Policies, policy groups, and instrumentation developed for HPOM for UNIX are now compatible with HPOM for Windows, and vice versa.

Subagent Management

This version of HPOM introduces a new type of subagent registration based on policy management features. Subagent assignment is handled by assigning subagent policies. Different versions of subagents have different versions of the respective subagent policies. This allows you to see which subagent is assigned to a managed node.

The subagent policies are not meant to be edited and are provided by a subagent supplier. Assigning such a policy to a node and deploying it using new options of the `opcragt` command installs the corresponding subagent on the node. The actual subagent policy is not deployed to the managed node and is not visible in the `opctemplate/ovpolicy` output.

Online Configuration Synchronization

This release of HPOM introduces automatic synchronization of configuration data between the HPOM management server and the Java UI without forcing the operator to log in again to make the changes effective. Synchronization can involve changes to nodes, applications, policies, groups, user profiles, and so on. The configuration data uploaded using `opcconfigupld` also does not require server restart.

Auditing

Auditing is redesigned to provide centralized event logging, four audit levels, and individual event logging configuration. Note that the audit information is no longer stored in a database, so old audit entries are lost when upgrading to HPOM 9.00. The individual audit area variables are managed by `opcconfig(1m)` and `ovconfchg(1m)`.

Unicode (UTF-8) support

This version of HPOM 9.00 introduces Unicode support. Both the Oracle database and the management server work exclusively with the UTF-8 character set, which provides multilingual support.

License Management

License management is redesigned to allow other product components to easily and flexibly integrate with HPOM. License reports are enhanced to list the license requirements of integrated components.

HPOM Web Services and Tool Web Service

HPOM Web Services enable you to develop remote clients that access HP Operations management servers using industry-standard terminology and technical standards, instead of product-specific interfaces. HPOM provides the Incident Web Service and the Tool Web Service. The Incident Web Service enables clients to access HPOM messages. The Tool Web Service enables clients to execute tools from an HP Operations management server.

New CLIs

HPOM 9.00 includes the following new command line interfaces. Refer to the man pages for more information.

- `opcappl`
- `opcinstrumcfg`
- `opcpoltype`
- `opcpolicy`
- `opcsrvconfig`
- `ovolicense`

New Variables

In addition to many variables introduced to support auditing, the following configuration variables are introduced:

- `OPC_XPL_SQL_TRACE`
- `OPC_KILL_OPUIWWW`
- `OPC_CFGUPLD_BLOCK_RETRY`
- `OPC_OVHARG_START_LOCAL_AGENT`
- `OPC_SUPPRESS_IF_NO_CORRELATION_MSGAPPLICATION`
- `OPC_SOURCE_FORW_NOTIF_TO_TT`
- `OPC_TRUNC_MSG`
- `OPC_PING_SIZE`
- `OPC_JGUI_VER_DOWNLOAD_URL`
- `OPC_EMPTY_NS_CACHE`
- `OPC_SUPPRESS_IF_NO_CORRELATION`
- `OPC_SUPPRESS_IF_NO_CORRELATION_MSGOBJECT`
- `OPC_ENABLE_FWDCHAIN_FWDSENDER_CMA`
- `OPC_SUPPRESS_IF_NO_CORRELATION_MSGGROUP`
- `OPC_MSG_BULK_INSERT_RATE`

For more information on the server configuration variables, see the *HPOM Server Configuration Variables* manual.

For the information on the audit-related variables, see the *HPOM Administrator's Reference*.

New APIs

Refer to the *HPOM Developer's Reference* guide for information about the following new APIs.

<code>opcinstrum_get_categories()</code>	<code>opcpolicytype_add_from_xml()</code>	<code>opcpolicybody_modify()</code>
<code>opcinstrum_get_category()</code>	<code>opcpolicytype_get()</code>	<code>opcpolicybody_modify_by_name()</code>
<code>opcinstrum_add_categories()</code>	<code>opcpolicytype_get_template()</code>	<code>opcpolicy_get_categories()</code>
<code>opcinstrum_del_categories()</code>	<code>opcpolicytype_modify()</code>	<code>opcpolicy_assign_categories()</code>
<code>opcinstrum_modify_categories()</code>	<code>opcpolicytype_delete()</code>	<code>opcpolicy_deassign_categories()</code>
<code>opcnode_assign_policy_groups()</code>	<code>opcpolicytype_write_xml()</code>	<code>opcpolicy_assignment_mode_set()</code>
<code>opcnode_deassign_policy_groups()</code>	<code>opcpolicytype_get_name_by_uuid()</code>	<code>opcpolicy_copy_assignments()</code>
<code>opcnode_get_policy_groups()</code>	<code>opcpolicytype_get_uuid_by_name()</code>	<code>opcpolicy_list_assignments()</code>
<code>opcnode_assign_policies()</code>	<code>opcpolicy_add()</code>	<code>opcpolicy_update_assignments()</code>
<code>opcnode_deassign_policies()</code>	<code>opcpolicy_get()</code>	<code>opcpolicygrp_get()</code>
<code>opcnode_get_policies()</code>	<code>opcpolicy_get_data()</code>	<code>opcpolicygrp_add()</code>
<code>opcnode_assign_categories()</code>	<code>opcpolicy_modify()</code>	<code>opcpolicygrp_create()</code>
<code>opcnode_deassign_categories()</code>	<code>opcpolicy_delete()</code>	<code>opcpolicygrp_modify()</code>
<code>opcnode_get_categories()</code>	<code>opcpolicy_copy()</code>	<code>opcpolicygrp_delete()</code>
<code>opcnodegrp_assign_policies()</code>	<code>opcpolicy_edit()</code>	<code>opcpolicygrp_copy()</code>
<code>opcnodegrp_deassign_policies()</code>	<code>opcpolicy_edit_body()</code>	<code>opcpolicygrp_get_list()</code>
<code>opcnodegrp_get_policies()</code>	<code>opcpolicy_get_list()</code>	<code>opcpolicygrp_get_data()</code>
<code>opcnodegrp_assign_policy_groups()</code>	<code>opcpolicy_get_list_by_type()</code>	<code>opcpolicygrp_assign_policies()</code>
<code>opcnodegrp_deassign_policy_groups()</code>	<code>opcpolicy_header_create()</code>	<code>opcpolicygrp_deassign_policies()</code>
<code>opcnodegrp_get_policy_groups()</code>	<code>opcpolicybody_get()</code>	<code>opcpolicygrp_list_assignments()</code>
<code>opcpolicytype_add()</code>		

Feature Enhancements

HPOM contains these enhancements:

Enhanced Java GUI

For a complete description of Java UI functionality, read the *HPOM Java GUI Operator's Guide*. Highlights include:

- **Service Enhancements**

A Service Map Table view is now available in addition to the graph and custom views. This view is similar to the message browser, listing services and their properties in a table. Service Map Table View is available for service submaps and custom maps, but not for service graphs.

- **Message Enhancements**

When exporting, dragging or printing messages from a message filter browser, the messages remain sorted as they were in the message filter browser.

- **Java GUI Window Enhancements**

A new option, `Stay On Top`, is added to the Preferences dialog. This option enables the Java UI windows (main and detached) to stay on top of other windows. A parameter, `stay_on_top`, is introduced in `itoopec`. The default value is `no`.

- Miscellaneous
 - HPOM Java UI can be launched via WebStart. A link for the WebStart launch of Java UI is added to the HPOM home page: `http://<server_name>:3443/ITO_OP/`.
 - The Java UI functionality is extended to support HTTPS and FTP hyperlinks in messages.
 - For Java UI clients connected in HTTPS mode, the `listguis` tool shows the following information: hostname (long name), IP address, connection type (https vs. socket), connection port (for example, 2531 for socket comm).
 - Some terminology is changed to be aligned with the HPOM for Windows. For example, Applications are now called Tools.

Enhanced Message Forwarding in MoM Environment

Message forwarding in MoM environment is enhanced as follows:

- When no keyword (`MSGCONTROLLINGMGR` | `NOTIFYMGR`) is set with HPOM 9.00, `MSGCONTROLLINGMGR` (normal messages) is assumed. With HPOM 8.xx, the default behavior was read-only messages without any keyword provided (`NOTIFYMGR` was assumed by default).
- Management server restart is no longer necessary to read a modified `msgforw` file.
- Enabled filtering on CMAs; CMA-name fix, CMA-value via pattern matching.

Syntax: `CMA NAME "<name>" VALUE "<pattern>"`

NOTE CMA names can be used with an “or“ operator.

Example of accepting all messages which have CMA `cma1` or `cma2` set:

```
CMA NAME "cma1|cma2" VALUE "<*>"
```

Construct patterns, like in template conditions.

- Nodes can be filtered via a pattern:

Construct patterns like for external nodes. Any one of the patterns specified in one line will match.

```
Syntax: NODEPATTERN <pattern_type> "<pattern>" [ <pattern_type> "<pattern>" [ ... ]]
```

where `<pattern_type>` can be either of `IPPATTERN` or `NAMEPATTERN`.

Example of matching all nodes having IP-address `192.168.*.*` or which have hostname `*.hp.com.`:

```
NODEPATTERN NAMEPATTERN "<*>.hp.com" NODEPATTERN IPPATTERN "192.168.<*>.<*>"
```

- Enabled filtering on node groups:

```
Syntax: NODE NODEGROUP "<node_group>" [ NODEGROUP "<node_group>" [ ... ]]
```

Enhanced HPOM Backup and Restore

HPOM backup and restore is enhanced. New RMAN-based backup scripts `opcbbackup_online` and `opcbbackup_offline` and RMAN-based restore scripts `opcrestore_online` and `opcrestore_offline` are introduced.

Enhanced CLIs

- opckack
- opccfgupld
- opchbp
- opcnode
- opcagtdbcfg
- opccsa
- opchistdown
- opcragt
- opccfguser
- opcdelmsg
- opclaygrp
- opctempl

For details about command line interface changes and enhancements, refer to the corresponding man pages.

Enhanced APIs

New functions in APIs:

- Configuration Stream Interface (CSI) is an extension of the Message Stream Interface (MSI) for synchronizing the configuration changes. CSI provides registration for the configuration changes to the internal (server processes, Java GUI) and external (API clients) configuration consumers. It can be used within the `opcif_open()` API. New interface types include:

`OPCSVIF_CFG_CHG_EVENTS`: enables registration for all configuration changes.

`OPCSVIF_CFG_CHG_EVENTS_GUI`: used with Java GUI to enable registration of events related to a specific operator.

- `OPCDATA_CSI_STRING (int)` is added to the `opconn_get_capability()` and `opconn_set_capability()` APIs. Returns the name of the client that opened a CSI with the `opcif_open()` call. Used to prevent this client to get back it's own configuration changes.
- `opcsync_inform_server()` is enhanced to inform the server and GUI processes of new configuration changes. The HPOM server and GUIs are kept up-to-date each time a change is performed.

Other Changes

HPOM contains these changes compared with HPOM 8.3x.

Installation of HPOM Management Server

New installation and configuration scripts, `ovinstall` and `ovoconfigure`, ensure fast and simple installation and configuration. The installation process now separates the software installation from the software configuration tasks, and break and re-entry points are available for easy customization and improved troubleshooting.

For detailed information about the prerequisites which must be met before installing and configuring HPOM, and the procedures themselves, refer to the *HPOM Installation Guide*.

Configuration Settings on the HPOM Management Server

The table below shows how configuration variables default values are changed with the HPOM 9.00 release in comparison with the 8.xx release. Note that these settings are not visible via `ovconfget -ovrg server` if the default has not been changed or explicitly set.

Variable	HPOM 8.xx Default	HPOM 9.00 Default
OPC_HTTPS_MSG_FORWARD	FALSE	TRUE
OPC_NAMESRV_CACHE_SIZE	100	5000
OPC_NAMESRV_RETRIES	3	1

Variable	HPOM 8.xx Default	HPOM 9.00 Default
OPC_NAMESRV_MAX_TIME	unset	200
OPC_USE_LOWERCASE	FALSE	TRUE
OPCUIWWW_BULK_MODE	FALSE	TRUE
OPCUIWWW_NEW_MSG_NO_DB	FALSE	TRUE
OPC_JGUI_WEBBRW_APPL_RESULT	FALSE	TRUE
OPC_UPDATE_DUPLICATED_SEVERITY	NONE	LAST_MESSAGE
OPC_UPDATE_DUPLICATED_MSGTEXT	NONE	LAST_MESSAGE
OPC_OPCCFGDWN_ALL_INCLUDE_SELDIST_SERVICES	FALSE	TRUE
OPCRAGT_USE_THREADS	FALSE	TRUE
OPC_FORWM_MAX_BULK_SIZE	0	100
OPC_TTNS_TIMEOUT	0	300
OPC_MSG_BULK_INSERT_RATE	not supported	100

Java GUI Support for Web Browsers

Only ActiveX and external browser are available, because the embedded web browser is removed from the Java GUI. A new value `activex` is added for `web_browser_type` in `itooprc`. Thus, the valid values are `external` and `activex`.

On Windows, ActiveX is the default browser. On Unix, only external browser is available. The valid values for the configuration variable `OPC_JGUI_INTERNBW_DISABLED` are `ACTIVEX` and `NONE`.

Node Management

With this release of HPOM, nodenames must be unique. In previous product versions it was the combination of the nodename and network type which needed to be unique. You could have the same nodename for an IP-node and a non-IP node, for example, if the name-service was not accessible when the first message for the node arrived, and later it was accessible. HPOM 9.00 makes no difference in handling IP nodes and non-IP nodes (type "Other"). This is the same approach which was previously enforced with the `OPC_NEW_NAMERES` setting.

The handling of nodes for external events has also been changed. An external node of type "IP Name" also matches messages from non-IP nodes.

The external node type "IP Name" is changed to "Name" and the external node type "Other" is changed to reflect the changed node management.

Changed License Passwords

The HPOM 9.00 management server license password is different from the HPOM 8.xx management server license password. If you plan to upgrade from HPOM 8.xx to HPOM 9.00, you must request a new license password from the Password Delivery Center (<https://webware.hp.com/welcome.asp>). HPOM 9.00 is not able to run with a HPOM 8.xx management server license password. All other HPOM 8.xx license passwords, such as Agent license passwords, can be re-used and might be migrated to the new IP address. For details, refer to the *HPOM Installation Guide for the Management Server*.

Cluster Support

HPOM 9.00 supports HP ServiceGuard 11.18 on the HP Operations management server. An extended distance cluster is also supported.

ECS Support

ECS support with HPOM 9.00 is changed as follows:

- **Changed ECS Process Config File Location**

The location of the configuration for the ECS process on the management server (`opcecm`) is moved to the shared disk. This avoids certain problems in HA cluster environments.

Old location: `/var/opt/OV/conf/OpC/mgmt_sv`

New location: `/var/opt/OV/shared/server/datafiles/policies/ec`

- **Enhanced functionality of the symbolic nodename `$MGMTSV`**

The symbolic nodename `$MGMTSV` can now be used in APIs and CLIs to:

- Assign and deassign ECS policies or policy groups containing ECS policies to `$MGMTSV`, for example:

```
# opcnode -[de]assign_pol node_name="\$MGMTSV" net_type=NETWORK_NO_NODE pol_type=ec  
pol_name=<name> [ version=<ver> ]
```

- List assigned policies of `$MGMTSV`, for example:

```
# opcnode -list_ass_pols node_name="\$MGMTSV" net_type=NETWORK_NO_NODE
```

The calls to deploy policies (`opcragt -dist`) and to deploy data/fact stores (`ovocomposer`) are unchanged compared to HPOM 8.xx.

- **Changed Verification Status of ECS Circuits**

In previous product versions, ECS circuits could not be deployed to an agent or the management server during the verification check, and were regarded as unverified. In HPOM 9.00, the distinction between verified and unverified ECS circuits is dropped. It is expected that all ECS circuits are verified (checked for syntax correctness). For unverified HPOM 8.xx circuits uploaded during the configuration upload to HPOM 9.00, a warning containing the concerned policy name and circuit is printed by `opccfgupld`. As opposed to HPOM 8.xx, the data can be deployed with HPOM 9.00.

SPI Support

HPOM 9.00 is provided without any SPI (including the OS SPI). SPI support will be added over time.

The existing HPOM SPIs (from 2006.1 SPI CD and 2008.1 SPI CD) cannot be installed on HPOM 9.00.

You can migrate your HPOM 8.xx configuration data to HPOM 9.00. This also includes templates and instrumentation of SPIs from the 2008.1 SPI CD which are installed on HPOM 8.xx, downloaded, and uploaded on HPOM 9.00.

Integration with Other HP Software Solutions

HPOM 9.00 provides integrations with other HP Software solutions, such as Network Node Manager i, Business Availability Center, and Dependency Mapping Automation. For a complete list and more information, visit the Support web site: http://support.openview.hp.com/sc/integration_catalog.jsp

Obsolescence Announcements

This section lists the obsolete features of this release of HPOM:

Obsolete Management Server Platforms

The following HP-UX management server platforms are obsolete:

- HP-UX PA-RISC
- HP-UX Itanium 11.23

Obsolete Java UI Platforms

- HP-UX PA-RISC all versions
- HP-UX Itanium 11.23
- Sun Solaris 8 and 9
- Red Hat 8
- MacOS X 10.3 and lower versions

The HPOM Java GUI no longer supports the embedded browser capability.

Obsolete HPOM Agent Platforms

- HP-UX 11.0
- HP-UX 10.20
- Linux Kernel 2.2 and 2.4, all derivatives
- Novell NetWare 4.x
- Tru64 UNIX
- Microsoft Windows NT 4.0
- HP MPE/iX
- IBM/Sequent ptx
- Microsoft Windows 2003 without SP
- Microsoft Windows 2000 (all editions; unless there is an extended Microsoft support contract)
- Microsoft Windows XP (SP1 and prior)
- RedHat Enterprise Linux 2.1
- HP-UX 11.22 (Itanium)
- OpenVMS 7.3.1

NOTE DCE- and NCS-based HPOM 7 agents have been obsolete since 2008.

Motif UI

The Admin Motif UI is obsolete. The Web-based Administration UI is used instead. For more information about the new Administration UI, see “Web-based Administration for HPOM for UNIX” on page 2.

The operators Motif UI is obsolete; use the Java GUI instead.

Template Administrator

The template administrator user is obsolete as a part of a Motif UI functionality. You can not use template administrator users in order to log in to the HPOM Administration UI. If you upload or create a template administrator user on HPOM, it is not used for HPOM Administration UI.

Instead of template administrator, use `ompolicy_adm` user to log in to the HPOM Administration UI or add a new HPOM Administration UI user and assign it to `ompolicy_adm` user group. An HPOM Administration UI user has rights to view and edit all policies. You should first log in as `admin` or `opc_adm` to the HPOM Administration UI, add a Policy administrator user, and assign that user the `ompolicy_adm` user group.

A utility is also provided to convert template administrator accounts into HPOM `ompolicy_adm` accounts. Refer to the *HP Operations Manager Administration UI Administration and Configuration Guide*, chapter “User Migration from HPOM 8.xx to AdminUI” for details.

DCE Communication

The DCE obsolescence includes the obsolescence of DCE-based agents, of communication to and from DCE-based agents, DCE-based message forwarding between management servers, escalating messages, the DCE security (the security library), the OpenAgent architecture, as well as Novell Netware agent, the RPC daemon agent, and Sun RPC agent. Also, the DCE RPC based communication on the HPOM management server has been changed to a queue and pipe mechanism.

HPOM Server to Server Configuration Upload with the `opcmgrdist` utility

Server to server configuration upload via the `opcmgrdist` utility is no longer supported. You can download config data on server A with `opccfgdwn`, copy the config data, for example, with secure copy (`scp`) to server B, and upload it there with `opccfgupld`.

Operator-initiated Message Escalation

The possibility to forward or escalate an HPOM message to another HPOM server by pressing the escalate button in the HPOM operational UIs is obsolete.

Obsolete Management Server Processes

The following HPOM processes are obsolete:

- `ovoareqhdlr`
- `opcctlm`
- `opcmgrdist`
- `opccmm`
- `opcdistm`
- `opcmsgrd`

libnspsv Library

The `libnspsv` library is deprecated. However, it is still present on the HP Operations management server for the backward compatibility. You can still use the integrations, applications or scripts linked to this library in the previous product versions.

Changed Control over HPOM Processes

The HPOM Control Manager (`opcctlm`) is obsolete. The control over HPOM processes is moved to the OV Control facility (the `ovcd` process). Some of Control Manager’s functionality is moved to the HPOM Request Sender (`ovoareqsdr`). The HPOM processes can be controlled by the `ovc` and `opcsv` CLI, but no longer by `ovstart`, `ovstop` and `ovstatus` CLIs, because Network Node Manager no longer runs on the same HPOM management server system.

NNM Local Integration

NNM cannot be installed on the same system as HPOM, thus the local integration with NNM is obsolete. However, an integration package is provided with HPOM 9.00 to work remotely with NNM 7.xx and NNMi 8.xx. As a consequence of this, HPOM does not support integration with the OV_PLATFORM type applications, for example, OV Applications and OV Services are not used anymore.

Service Navigator Value Pack (SNVP)

No new version of SNVP is available with the HPOM 9.00. Check the HP Dependency Mapping Automation software and HP Operations Manager i software as potential replacements.

Obsolete CLIs and CLI options

All CLIs provided by NNM are no longer available on the HPOM management server. Therefore CLIs such as ovstart, ovstop, ovstatus, ovw, ovaddobj no longer exist. Check your working procedures and scripts for NNM commands and make the adjustments, where appropriate. Other obsolete CLIs:

- opc_backup
- opc_recover
- opcmgrdist
- opctmplrpt
- opcauddwn
- opccfgupld: the -ascii option
- opccfgupld: the -deloldtempl option
- opcmomchk: the -escalation option
- opcpwd
- opclie
- opcsvreg
- opcsvskm
- opctranm
- ovbackup.ovpl
- ovrestore.ovpl

Obsolete Configuration Variables

- DCEMR_PROG
- DISTM_PROG
- OPC_CFG_KEY_TAB
- OPC_CFG_SEC_LEVEL
- OPC_COMM_PORT_DISTM
- OPC_DISABLE_EXT_DCE_SRV
- OPC_DOWNLOAD_TEMPL_INDIVIDUAL
- OPC_SKIP_DCE_FORWARDING
- OPC_FORWARD_MGR_DCE_QUEUE
- OPC_CHK_DCE_ADDR_MISMATCH
- OPC_FORWARD_MGR_DCE_PIPE
- OPC_COMM_LOOKUP_RPC_SRV
- OPC_COMM_PORT_RANGE
- OPC_HBP_USE_ALL_PROTOCOLS
- OPC_HPDCE_CLIENT_DISC_TIME
- OPC_OPCCTLM_KILL_OPCUIWWW
- OPC_OPCCTLM_START_OPCSVCAM
- OPC_RESTART_COUNT
- OPC_RESTART_DELAY
- OPC_RESTART_PROCESS
- OPC_RESTART_TIMEFRAME
- OPC_SKIP_DCE_FORWARDING
- OPC_USE_DCE_FORWM
- OPCTRANM_TIMEOUT
- OPC_MSGM_USE_GUI_THREAD
- OPC_COMM_REGISTER_RPC_SRV
- OPC_COMM_RPC_PORT_FILE
- OPC_DCE_TRC_OPTS
- OPC_MSG_FORW_CHECKALIVE_INTERVAL
- OPC_MSGFORW_BUFFERING

Obsolete APIs

- opcsync_inform_user()
- opcmmsg_escalate()

Miscellaneous

- Expressions <S> and <nS>
The pattern-matching expressions <S> and <nS> used in templates are obsolete.
- Obsolete itooprc parameters
 - which_browser
 - auto and manual values for web_browser_type
 - ice_proxy*
 - web_browser_html_appl_result
- Obsolete values for configuration variable OPC_JGUI_INTERNBW_DISABLED
 - EMBEDDED
 - BOTH

Installation Notes

Installation requirements, as well as instructions for installing HPOM, are documented in the *HPOM Installation Guide*. The document file is included on the product's DVD media at:

/Documentation/InstallationGuide.pdf

After installation the document can be found at:

/opt/OV/www/htdocs/ito_doc/C/manuals/InstallationGuide.pdf

To check for recent updates or to verify that you are using the most recent edition, go to the Support web site.

HPOM 9.00 introduces a new approach to product installation and configuration. Installing and configuring the HPOM software on the management server are fast and easy procedures due to the HPOM installation and configuration scripts, `ovoinstall` and `ovoconfigure`, which guide you through the entire installation and configuration procedure.

For general installation requirements, see Chapter 2, “Management Server and Java UI Installation Requirements.”

For detailed information about the prerequisites, which must be met before installing and configuring HPOM, and the procedures themselves, refer to the *HPOM Installation Guide*.

The `/README.txt` readme file describes the HPOM media DVD contents and layout and help you to locate products and documentation.

Hardware Requirements

The following hardware requirements are not documented in the *HPOM Installation Guide*.

- The HP Integrity CPUs on the management server must be version rx2660 or higher.
- The HTTPS Agent requires up to 300 MB of disk space, and up to 600 MB during the installation or upgrade.

Software Requirements

This section lists additional software requirements that are not documented in the HP support matrices. To check for recent updates on the HPOM management server and HTTPS agent supported operating systems, visit the following URL: <http://support.openview.hp.com/selfsolve/document/KM323488>.

You will also receive updated or new editions if you subscribe to the appropriate product support service. Contact your HP sales representative for details.

Management Server

For detailed information about the management server software requirements, refer to the *HPOM Installation Guide for the Management Server*. As a prerequisite for the HP Operations management server installation, your system must have the following patches installed:

Table 1 Operating System and Environment Patches

You can download the required HP-UX operating system and environment patches from: http://itrc.hp.com . Note, that you need to register for itrc . If you have the patches already installed on your system, you will be notified by a message.	
The following OS patches are required by Oracle 11g:	
PHCO_37483	scsimgr cumulative patch
PHKL_35900	11.31 evacd performance, kvaddr leak panic
PHKL_36248	11.31 esctl cumulative patch
PHKL_36249	11.31 esdisk cumulative patch
PHKL_35936	11.31 call to read(2) or write(2) may incorrectly return -1
Check the Oracle documentation for more information.	

Refer to Chapter 2 of the *HPOM Installation Guide for the Management Server* for detailed instructions on how to install HPOM, and to “Known Problems, Limitations, and Workarounds” on page 16 for known problems and their workarounds.

NOTE It can be very helpful to set the PATH variable to include the following HPOM directories on the management server: /opt/OV/bin, /opt/OV/bin/OpC, /opt/OV/nonOV/perl/a/bin and /opt/OV/bin/OpC/utls.

Likewise, export the MANPATH variable in order to access HPOM man pages:

```
export MANPATH=$MANPATH:/opt/OV/man
```

NOTE If you want to use `hpterm` for running Input/Output applications, you must run the following command:

```
# ln -s /usr/contrib/bin/X11/hpterm /usr/bin/X11/hpterm
```

You need to run the above command only once.

Oracle Database

The supported Oracle database version is 11.1.0.7.

The Oracle compatible parameter specifies the release with which Oracle must maintain compatibility to. By default, an HPOM installation sets the Oracle compatible parameter to 11.1.0.0.

IMPORTANT Install the Oracle binaries *before* the HPOM 9.00 installation, but *do not* create any kind of database, because HPOM requires specific settings.

Java UI Supported Platforms

Before installing the HPOM Java GUI, ensure that your system meets the following hardware and software requirements described in this section.

HPOM bundles JRE for all supported MS Windows platforms. For all other platforms you must download the required Java Runtime.

Table 2 Support Matrix - Java UI

Java Runtime	JRE	JRE Plug-in	JRE Plug-in	JRE Plug-in
TYPE	as Application	Internet Explorer 5.5, 6, 7	Safari 1.3.2	Mozilla 1.7
Windows 2000 Windows XP Windows 2003 Windows Vista	1.6.0_12	1.6.0_12	N/A	1.6.0_12
Windows 2003 for Itanium	N/A	1.6.0_12	N/A	1.6.0_12
Red Hat Enterprise Linux 3 Solaris 10	1.6.0_12	N/A	N/A	1.6.0_12
HP-UX Itanium 11.31	1.6.0_10	N/A	N/A	1.6.0_10
Mac Os	1.6.0_7	N/A	1.6.0_7	1.6.0_7

NOTE If the default JRE version installed with the operating system is not the same as the one required by HPOM, install the supported Java Runtime Environment JRE from the following location:

<http://www.hp.com/products1/unix/java/>

Set the location of the installed JRE directory to the JAVA_DIR environment variable, for example.:

```
export JAVA_DIR=/opt/OV/nonOV/jre/b
```

HTTPS Agents

HPOM 9.00 supports HP Operations agent 8.54 and higher. For more information about the supported HP Operations agent versions, platforms, known problems and workarounds, refer to the *HP Operations Agent Release Notes* which can be found by selecting `Operations Agent` at the following location:
<http://support.openview.hp.com/selfsolve/manuals>

As a prerequisite for the HP Operations agent installation, your system must meet operating system specific software and hardware requirements. Supported platforms and requirements can be found online at the following location: <http://support.openview.hp.com/selfsolve/document/KM323488>:

IMPORTANT Make sure you have either REXEC, RSH, or SSH services enabled on the remote agent before you start the HPOM agent installation from the HPOM management server. Otherwise the agent installation fails.

Known Installation Problems and Workarounds

Symptom QCCR1A91189

Category path contains sub path "Windows" twice (.../Windows/Windows/...)

The path to the instrumentation data for the Windows platform
`/var/opt/OV/share/databases/OpC/mgd_node/instrumentation/<category_name>/Windows/Windows` is inconsistent with the path used by HPOM for Windows. Therefore, sub path "Windows/Windows" needs to be replaced by "Windows". This will be fixed with an HPOM patch.

Solution

Do not place instrumentation files under
`/var/opt/OV/share/databases/OpC/mgd_node/instrumentation/<category_name>/Windows/Windows` or its sub-directories.

Place the specific Windows files under the following directory:

```
/var/opt/OV/share/databases/OpC/mgd_node/instrumentation/<category_name>/Windows
```

Known Problems, Limitations, and Workarounds

Management Server

Symptom QCCR1A89555

Policy assignment conflicts can lead to undefined behavior during deployment

If one version of a policy is directly assigned to a managed node, while another version of the same policy is assigned to that same node through a policy-to-node-group assignment, it is undefined which version will be deployed. This will be fixed with the upcoming patch.

Solution

Make sure that only a single version of the policy is assigned to the managed node. Use the `opcnode -list_ass_pols` and `opcnode -list_ass_pol_groups` commands combined with the `opcpolicy -list_group` command to obtain full information about policies assigned to nodes.

Symptom QCCR1A90500

opcecm/opcecmas needs to be stopped manually after removing an ECS policy

The OV control daemon is capable of auto-starting the `opcecm` and `opcecmas` processes after an ECS policy is installed. However, it does not stop them after deassigning it.

Solution

Stop the processes manually using the following commands:

```
# ovc -stop opcecm
# ovc -stop opcecmas
```

Symptom QCCR1A91161

Policy is assigned even if mode given for assignment is invalid

The `opcnode` command-line tool assumes that assignment mode is set to `FIX`, if the value of the `'mode'` argument is not recognized as one of `FIX`, `LATEST`, and `MINOR_TO_LATEST`. This can lead to undesired behavior if a typo occurs when specifying the assignment mode (for example, `LASTET` instead of `LATEST` will end up as `FIX`).

Solution

Make sure that the assignment mode keywords are correct when using `opcnode` command-line tool.

Symptom QCCR1A92377

No new policy version created if another version with same major number and same content already exists.

Example: you have policy versions 1.0, 1.1, 1.2. All three have different content. If you modify 1.2 and by accident its content is identical to 1.0. The version will not be stored; no 1.3 is created.

Solution

Add a space somewhere in the policy where it doesn't disturb anything. The policy looks different then and will be saved with the new version number.

Symptom QCCR1A91216

Some policies are not uploaded to the DB while others are

Scenario 1:

During upgrade from HPOM 8.xx to version 9.00, during migration, or during the configuration download/upload, messages similar to the following may be printed. For example:

```
# opccfgupld -replace -subentity <upld_dir>
...
parsing data file "/tmp/081123/C/TEMPLATES/LOGFILE/logfile.dat"
Error signing policy header for policy ApplEventLog_AcronisÂ TrueÂ ImageÂ EchoÂ Server.
...
500 policies to upload; 499 are ok (80 skipped, identical in DB)
...
```

Scenario 2:

When you upload one or more policies using `opcpolicy`:

```
# /opt/OV/bin/OpC/utils/opcpolicy -upload dir=/tmp/POLICIES
```

Error uploading policy from `/tmp/POLICIES` into database.

Output in `/var/opt/OV/log/System.txt`:

```
...
```

```
0: INF: Tue Apr 21 13:16:10 2009: opctempl (11388/1): [policy.cpp:595]: Invalid checksum
detected in policy header da93ee72-2a5d-71de-00a3-1039249e0000_header.xml. (OpC40-2375)
0: INF: Tue Apr 21 13:16:10 2009: opctempl (11388/1): [opcpolicy_api.c:604]: An error
occurred while reading policy header da93ee72-2a5d-71de-00a3-1039249e0000_header.xml.
(OpC40-2349)
```

Solution

Make sure that `$LANG` is set to a UTF8 codeset value. For example, `C.utf8`, `en_US.utf8`, `de_DE.utf8`, `ja_JP.utf8`. If not, set `$LANG` to an appropriate value. Run the `opccfgupld` or `opcpolicy` call again.

Symptom QCCR1A89501**Policy group part of the opctempl and opcpolicy manpages are missing**

The description of the policy group related options such as `-add_group`, `-del_group`, `-add_to_group` and other are missing in the `opctempl(1m)` and `opcpolicy(1m)` manpages.

Solution

See the usage output of `opctempl` and `opcpolicy`, which is up to date.

Symptom QCCR1A90489**Category instrumentation from the <OS_VERSION> directory is not deployed**

The instrumentation files for any category under the `<OS_VERSION>` directory tree may not be deployed. After deployment of the instrumentation to the agent, the instrumentation files are not written to the directory on the agent.

For example, after deployment of

```
/var/opt/OV/share/databases/OpC/mgd_node/instrumentation/<category_name>/Unix/Linux/x86/2.6/<any_script.sh>,
the <any_script.sh> files are missing from the /var/opt/OV/bin/instrumentation
directory on the agent.
```

Solution

On the management server execute the following command:

```
# ovdeploy -cmd ovodetect -host <node>
```

Redeploy instrumentation to the agent system:

```
# opcragt -distrib -instrum <node>
```

Symptom QCCR1A91338**opcinstrumcfg does not delete categories from the database**

With call `opcinstrumcfg -del [force]` categories are deleted only from a file system and not from the database.

Solution

To delete a category from the database, use the `opctempl -del_cat` command or the Administration GUI.

If you want to delete a category using the `force` option, make sure that the category also exists in the file system. To get a list of all categories which are present only in the database, run the following command:

```
# opcinstrumcfg -check
```

To create a category in the file system only, use the following command:

```
# opcinstrumcfg -update_all <category_name>
```

Symptom QCCR1A90549

During deployment, a warning message is written to System.txt

```
# 0: WRN: Thu Apr  2 10:56:49 2009: opcbbcdist (4327/7): [DBHandler.cpp:1790]: Error
occurred while getting instrumentation value: Type is MAP_CPU_TYPE. Assd value is ia64.
(OpC40-2700)
```

Solution

This message can be safely ignored.

Symptom QCCR1A91906

opccbist reports file name collisions even within the SAME category

When placing files with the same name in different levels of a CATEGORY file tree, opcbbcdist reports file name collisions. For example:

```
File name collision detected:
/var/opt/OV/share/databases/OpC/mgd_node/instrumentation/TEST_Category/pb.bat --->
/var/opt/OV/share/databases/OpC/mgd_node/instrumentation/TEST_Category/Windows/pb.bat
(OpC40-1860)
```

Solution

The warning message can safely be ignored if the collision happens within the same CATEGORY.

Symptom QCCR1A89492

The opccfgupld -check option does not check policies and policy groups

Solution

For policies you can use the following command to perform a syntax check.:

```
# /opt/OV/bin/OpC/utils/opcpolicy -check <policy_data_file>
```

Policy groups should only be modified using the opcpolicy command line utility or through GUI so that no syntax check becomes necessary.

Symptom QCCR1A90865

Warning messages on the standard output and in System.txt during upload of HPOM 8.xx configuration:

```
Warning - Platform missing (net/machine=1/17).
Warning - Platform missing (net/machine=1/41).
Warning - Platform missing (net/machine=1/40).
Object already available in database (opc_node_defaults: 1/43).
Warning - Platform missing (net/machine=1/27).
Object already available in database (opc_node_defaults: 1/44).
Warning - Platform missing (net/machine=1/6).
Object already available in database (opc_node_defaults: 1/49).
Object already available in database (opc_node_defaults: 1/0).
Warning - Platform missing (net/machine=1/38).
Object already available in database (opc_node_defaults: 1/47).
Warning - Platform missing (net/machine=1/11).
Object already available in database (opc_node_defaults: 1/45).
Object already available in database (opc_node_defaults: 5/20).
Warning - Platform missing (net/machine=1/26).
Warning - Platform missing (net/machine=1/9).
Warning - Platform missing (net/machine=1/8).
```

Warning - Platform missing (net/machine=1/10).
Object already available in database (opc_node_defaults: 1/50).
Warning: not all requested objects were processed.

Solution

The warning messages can be safely ignored. All warnings appear when DCE platforms are uploaded.

Symptom QCCR1A90937

During upgrade from HPOM 8.xx to 9.00, opccfgupld on HPOM 9.00 aborts while processing template groups

This occurs on the HPOM 8.xx system when the configuration setting `OPC_DOWNLOAD_TEMPL_INDIVIDUAL` is set to `TRUE`. Several lines of output similar to the following are produced to `stderr` and to the `opccfgupld` logfile `/var/opt/OV/log/OpC/mgmt_sv/opccfgupld.log` on HPOM 9.00 before the program exits with 1: "Illegal value `OSSPI_SOL_NP_FileSystems_1` (function upload: templ group conversion)"

Any data that should have been uploaded after the template groups is skipped.

Solution

1. Check to see if the HPOM 8.xx setting for `OPC_DOWNLOAD_TEMPL_INDIVIDUAL` is set to `TRUE`:

```
# /opt/OV/bin/ovconfget -ovrg server opc OPC_DOWNLOAD_TEMPL_INDIVIDUAL
```

2. If yes, repeat the download on 8.xx with the setting changed to `FALSE`:

```
# /opt/OV/bin/ovconfchg -ovrg server -ns opc -set OPC_DOWNLOAD_TEMPL_INDIVIDUAL FALSE
# rm -rf <previous_download_dir>
# /opt/OV/bin/OpC/opccfgdwn <options_from_last_call> <previous_download_dir>
```

3. Copy the download directory to the HPOM 9.00 system and repeat the upload:

```
# /opt/OV/bin/OpC/opccfgupld -replace -subentity <further_options_from_last_call>
```

After that, the HPOM 9.00 database should be consistent again.

Symptom QCCR1A90622

Invalid network type for nodes of type `PATTERN_OTHER`.

After a node with the network type `PATTERN_OTHER` is added, its network type is set to `PATTERN_IP_NAME`.

Solution

This is expected behavior, as `PATTERN_OTHER` is internally mapped to `PATTERN_IP_NAME`. Keyword `PATTERN_OTHER` is deprecated. Use `PATTERN_IP_NAME` instead.

Symptom QCCR1A54513 Remote action security rule is still provided for deleted node group

If you delete a node group from the Node Group Bank and this node group is controlled by remote action authorization rule, which is defined in configuration file `/etc/opt/OV/share/conf/OpC/mgmt_sv/remactconf.xml`, those rules still apply to this node group and the nodes which were in this group.

Solution

Do not delete node group and remove nodes from this group. In this case, all rules which applied to this node group no longer have any effect on such nodes.

Symptom QCCR1A91231

Changing the node name pattern for an "external node" returns a database error.

Solution

Delete external-node entry and then create it again with the correct pattern string.

Symptom QCCR1A90670

External node patterns with uppercase letters don't work any more and messages are discarded

In HPOM 9.00, the configuration setting `OPC_USE_LOWERCASE` is set to `TRUE` by default. This means that all node names mentioned in messages are converted to lowercase. If you have an external node pattern containing uppercase letters, it will not match anymore.

Example: Not using `OPC_USE_LOWERCASE` with HPOM 8.xx and with nodes that were upper case (for example, a Windows system uses `ROS50831.hp.com`), and the external nodes pattern is `^^ROS<*>$`.

Solution

The problem will be fixed in an upcoming HPOM 9.00 patch by treating external node patterns as case-insensitive. Be aware that with HPOM 9.00, the concept of identifying a system has changed: the case-insensitive hostname is regarded as being unique. With HPOM 8.xx, it was the hostname + network type which had to be unique.

If you have external node patterns with uppercase letters, you should either:

- Change them to lowercase (recommended).
- Run the following command:

```
# ovconfchg -ovrg server -ns opc -set OPC_USE_LOWERCASE FALSE
```

Symptom QCCR1A91220

Error while assigning applications to a group using `opcappl -assign_app_to_grp app_list=<APPL WITH BLANKS>` to `_appgrp_name=<some_group>`

If you assign applications to an application group using the `opcappl` command with the `app_list` option, you may get the following error:

```
Error assigning applications to application group <group_name>.
```

Solution

If the application has spaces within the application name, use the `app_name` instead of the `app_list` option, refer to the `opcappl(1M)` man page for details. In this case you should perform a separate `opcappl` call for each application from `app_list`.

Symptom QCCR1A91221

Adding multiple nodes to a node list with `opcappl` fails

When adding multiple nodes to node list, using the syntax `node_list="node1 node2"`, the command fails.

Solution

When you want to specify more nodes when using the `opcappl` tool, use the `node_list` attribute. Separator in this attribute is pipe `|`. For example, `node_list="node1|node2"`

Symptom QCCR1A92899

Install of agent on a Linux node with the latest glibc version (2.9 and higher) fails.

Installation fails due to incorrect recognition of the `glibc` version (versions higher than 2.9). When using the latest version (2.10.1), the installation script incorrectly recognizes it as version 2.1 and exits, because version 2.1 is too old.

Symptom QCCR1A90155

There is no localized manual on the management server.

If you are logged in to the Chinese Java GUI and click Operator's Guide (PDF), you will get an error, because localized manuals are not yet available.

Solution

Use the English version of manual which is located on server: /opt/OV/www/htdocs/ito_doc/C/manuals/

Symptom QCCR1A61222

ovc -kill command takes long to complete

ovc -kill hangs for few minutes before all processes are stopped.

Solution

A hotfix for this problem is available from your local HP support contact.

Symptom QCCR1A61275

During ovoremove, an error occurs while removing HPOvCtrl or some other package

During server removal using the ovoremove script, a message similar to the following appears:

```
HPOvCtrl          (6.10.025) . . . . FAILED
ERROR:   Error occurred while removing HPOvCtrl package
        Please check /var/opt/OV/log/OpC/mgmt_sv/installation.log.error for details
```

After checking the installation log files, you find that the reason for this problem is package dependency.

Solution

This package cannot be removed because some other packages depend on it. For this reason, use skip to continue. This will skip package removal, and the package will stay on the system. For example:

```
[repeat,skip,back,exit,?] : skip
```

Symptom QCCR1A90462

opconn_cs_reset() sometimes does not reset status message

It is possible that after calling opconn_cs_reset() the status message is not reset.

Solution

To ensure that you always get the correct message, call opconn_cs_set() with an empty string (not NULL!) as the 'message' parameter after calling opconn_cs_reset().

Symptom QCCR1A90808

**System.txt: There is no server process active for address:
'https://localhost/com.hp.ov.agtrep.notificationreceiver/bbcrcpserver'**

This error message may be printed in System.txt every time the ovconfchg operation is executed.

Solution

If no policy of type svcdisc was deployed to an agent, the error message can be ignored.

Symptom QCCR1A90623

Problems when running HP ECS Composer GUI via ovocomposer -ui

When running HP ECS Composer started via ovocomposer -ui the following problems may occur:

- menus/drop down boxes may disappear
- old values appear after cancelling or re-opening a window

- flashing cursor above the Field column in the Definition tab

Solution

Run the HP ECS Composer GUI using JRE 1.5. To use JRE 1.5 do the following:

1. Close HP ECS Composer GUI.
2. In `/opt/OV/bin/ov.envvars.sh`, comment out the following line:

```
OV_JRE="/opt/OV/nonOV/jre/b"; export OV_JRE  
as follows:
```

```
#OV_JRE="/opt/OV/nonOV/jre/b"; export OV_JRE
```

3. Export `$PATH` to the JRE 1.5 on the system. For example:

```
# export PATH=$PATH:/opt/java1.5/jre/bin/IA64N
```

4. Run the following command again:

```
# /opt/OV/bin/OpC/ovocomposer -ui
```

Symptom QCCR1A90619

opccfgdwn core dumps while downloading policy groups

During `opccfgdwn` and downloading all policy groups, the following can happen:

```
aCC runtime: Uncaught exception of type "OvXplMsg::IllegalArgumentError_t".  
Abort(core dump)
```

The problem could occur when there is non-ASCII data (for example, umlauts in the policy group description text), related to policy groups. In addition, the problem may occur if the `LANG` environment variable is non-utf8, such as `LANG=C`.

Solution

Set `$LANG` to a utf8 codeset and call `opccfgdwn` again.

Example 1: Change from `C` to `C.utf8`:

```
# export LANG=C.utf8
```

Example 2: Change from `de_DE.iso885915@euro` to `de_DE.utf8`:

```
# export LANG=de_DE.utf8
```

Symptom QCCR1A89584

All policies can be assigned to `$MGMTSV`

Currently, there is no type checking when assigning policies to the management server using the `$MGMTSV` keyword with `opcnode` command-line utility. Only Event Correlation policies are effective when deployed to management server, although there are no adverse effects if policies of other types are deployed as well. It may, however, lead to confusion.

Solution

Make sure that only EC type policies are assigned to the management server when using `$MGMTSV` keyword with `opcnode -assign_pol`. Any types of policies can be assigned to the HP Operations agent running on the management server machine. For this assignment, use the local node name instead of the `$MGMTSV` keyword.

Symptom QCCR1A90655
DBID is not correctly stored during backup when using a remote DB

This code identifies the HPOM Oracle database, and may be needed in some cases for manual database restoration.

Solution

To get the DBID code, log in to the database as dba and run the following query:

```
"select dbid from v$database;"
```

Symptom QCCR1A89335
System.txt: Certificate request with the id '<some_id>' could not be found in the queue.

The following warning messages appear in `System.txt` if you automatically add a node to the HPOM database right after granting the certificate; for example, when using `opccsa -grant -add_node <hostname|CertreqId>`:

```
0: INF: Tue Mar 10 01:18:17 2009: opccsad (29908/3): Deleting certificate request with id '0fbef264-9322-7538-0203-d2dd529263df'.
0: WRN: Tue Mar 10 01:18:17 2009: opccsad (29908/3): Certificate request with id '0fbef264-9322-7538-0203-d2dd529263df' could not be found in the queue.
```

Solution

The warning messages in `System.txt` can be safely ignored

Symptom QCCR1A90244
OVO or ITO string can still be present

In API manpages and sql reports, some strings may contain old product names: OVO or ITO.

Solution

Read these strings as “HPOM”.

Symptom QCCR1A91820
OVPM tools executed on another OVPM server require clean-up before installing OVPM integration

After installing new version of OVPM or upgrading it, the old OVPM server name is still used for OVPM. The problem is that the OVPM installation script fails to change the OVPM server name in the database:

```
/opt/OV/contrib/OpC/OVPM/install_OVPM.sh <new OVPM server>:8081
```

Solution

Before installing a new OVPM server on the HPOM management server, remove all the OVPM templates and applications.

Symptom QCCR1A92218
Installation ignores Oracle HARG name setting in cluster environment

Oracle HA resource group is not configured correctly on an additional cluster node if a custom name (other than `ov-oracle`) is used.

Solution

Use the default name for the Oracle HARG `ov-oracle` or, if you want to use a custom name, perform the following steps on an additional cluster node after the installation is finished:

```
/opt/OV/bin/ovconfchg -ns opc -set HA_ORACLE_RESOURCE_GROUP <Oracle_HARG>
mv /var/opt/OV/hacluster/ov-oracle /var/opt/OV/hacluster/<Oracle_HARG>
/opt/OV/bin/ovharg_config <Oracle_HARG> -add_node <node_name>
```


where `<Oracle_HARG>` is the name of the Oracle HARG.

Symptom QCCR1A92228
"Old system" audit entries in the audit log files

Audit log contains entries referencing "old system". These are old audit entries from HPOM 8.xx.

Solution

These entries can be ignored and will disappear in a future release.

Symptom QCCR1A92288
ovoconfigure does not provide any notification if Oracle listener config files must be merged.

If the database setup finds existing listener config files, it may fail. There will be no message on screen explaining why, but `opcdbsetup.log` explains what happened during configuration of listener files, and how to solve the situation (merging these files manually). For example:

```
It seems Oracle Net listener is already configured on this system
tnsnames.ora with other Oracle Net listener alias than <alias>.
OVO can create Oracle Net listener files, but it cannot modify existing
Oracle Net listener configuration. Please configure now another Oracle Net listener
alias for OVO manually (or use the existing one if it is
for the same Oracle instance), re-start the Oracle Net listener listener
and specify the used Oracle Net listener alias.
If you do not need the old Oracle Net listener files, you can call
opcsqlnetconf to configure Oracle Net listener and overwrite the old
files (it will use the Oracle Net listener alias <alias>.
```

Solution

Check `opcdbsetup.log` after failed installation. If this is the cause, merge the `.OVO` listener files manually and retry.

Symptom QCCR1A90239
/usr/lib/hpux32/d1d.so: Unsatisfied code symbol 'opcmsg_escalate' in load module.

Symbols are not resolved for the 3rd party applications depending on `libnspsv.so`.

Solution

With HPOM 9.00, the "escalation" functionality is obsolete. Applications that use the `opcmsg_escalate()` API must be modified not to use this API anymore.

Symptom QCCR1A92360
Unsupported application type for internal HPOM tools.

The only supported application type for the internal HPOM application (tool) is `BROADCAST`.

Solution

Although you can still add other types of internal application beside `BROADCAST` via Administration GUI, `opcapp(1M)`, or API, those are neither supported nor visible in the Java Operator's GUI. This can also happen when migrating from HPOM 8.xx to HPOM 9.00.

Symptom QCCR1A89186
ECS server policies are removed from datafiles directory only if -force option is used

If ECS policies are assigned to the management server and then deassigned, the files are not removed from `/var/opt/OV/shared/server/datafiles/policies/ec` directory, unless the `-force` option is used. This does not affect ECS policies assigned to managed nodes.

Solution

To completely remove the files after de-assignment, use the `-force` option:

```
#opcragt -dist -force "\$MGMTSV"
```

Symptom QCCR1A91325

When running `opcdbck`, errors occur

When running `opcdbck`, errors occur, including:

Database: ORA-00942: table or view does not exist (OpC50-15)

Database: ORA-01418: specified index does not exist (OpC50-15)

The errors occur because the `opcdbck` tool depends on the file `opc.checkfile`, which is not in sync with the current HPOM 9.00 configuration.

Solution

Do not use this tool. Support will be provided with the first HPOM 9.00 patch.

Symptom QCCR1A91292

`stacktrace -all` does not check `/var/opt/OV/share/tmp/OpC/mgmt_sv/core` which is a common location for core files on HPOM 9.00.

Solution

After running `stacktrace -all`, run `stacktrace` again and specifically indicate this location:

```
/opt/OV/contrib/OpC/stacktrace /var/opt/OV/share/tmp/OpC/mgmt_sv/core
```

Symptom QCCR1A58365

Backward compatibility `opctempl` command options `-add`, `-modify`, `-delete` are not working

Also all API functions of the `opctemplfile_*` family that modify the database do not work.

Solution

Backward compatibility options will be fixed in one of the next patches. To have the same functionality as with the `opctempl` command, use the following new options with `opcpolicy`:

```
# opcpolicy -upload
# opcpolicy -update
# opcpolicy -remove
# opcpolicy -add_group
# opcpolicy -del_group
```

To have the same functionality, as with the `opctemplfile_*` APIs, use the appropriate `opcpolicy_*` and `opcpolicygrp_*` API functions.

Refer to the corresponding man pages for details how to use the `opcpolicy` command and the `opcpolicy_*`, `opcpolicygrp_*` API functions.

Java GUI

Symptom QCCR1A55228

At Java UI exit or log-off an error message appears in the console

When exiting or logging off from the Java UI an error message similar to this is printed in the console:

```
ERROR MSG, 7:42:47 AM, com.hp.ov.it.comm.OvEmbHttpClient:
https status - InternalServerError:text/html,
Message = HTTP/1.1 500 Internal Server Error
Date: Wed, 11 May 2005 05:41:57 GMT
```

```
Transfer-Encoding: chunked
Server: BBC 05.20.010; opcuihttps 01.00.000
senderid: e6979118-acal-750b-1f6a-de6eb9cfe391
Cache-Control: no-cache
Content-Type: text/html
```

Solution

The error message can be safely ignored.

Symptom QCCR1A57461

Wrong cursor shape after resizing Windows/Dialogs

When using the HP One Voice or Metal look and feel, the cursor stays in resizing shape when it is inside the window or dialog, after quickly resizing windows or dialogs and releasing the mouse button. This can be visible:

- In windows: when the cursor is on the title bar or on menu bar.
- In dialogs: in the whole dialog.

Solution

Use a different look and feel.

Symptom QCCR1A56713

No notification about error with https_only enabled

When variable `https_only` is set to "yes" in `ito_op.bat` and secure connection cannot be established, the user is not notified, but the login dialog appears again.

Solution

Check the console for an error message.

Symptom QCCR1A57053

Read-only messages are not entirely correctly handled when using Java UI as opc_adm

When read-only messages (with an R flag set) are selected together with normal messages, the following actions can be done: acknowledge, unacknowledge, own, disown, unbuffer, running actions, adding annotations.

This is a defect, it should not be possible to do anything with read-only messages. These problems occur only with the `opc_adm` operator and some happen only with bulk mode disabled (`OPCUIWWW_BULK_MODE=FALSE`).

Solution

Use a non-admin operator (for example, `opc_op`) to perform the required tasks.

Symptom QCCR1A57332

Key accelerator feature breaks some default Java key assignments

Some of the default Java key assignments do not work due to the way key accelerators are implemented in Java UI.

Solution

None.

Symptom QCCR1A91381

Use of external web browser for help page is not saved to itooprc

In the preferences dialog box, a checkbox can be set to use an external web browser for the online help.

The setting is not stored to `itooprc` and thus lost between Java UI sessions.

It also does not apply to the current session.

Solution

Add following line manually to the `itoopec` file (located in the home directory of the user who activated the Java GUI and clicked on the OK button in the Preferences dialog):

```
ext_web_help true
```

Symptom QCCR1A92292

Online GUI Sync: After the tools configuration is changed, the list of tools in popup menu still reflects old status

After the tools configuration is changed, Java UI receives config change notification and updates its components accordingly except the `Tools` submenu in the `Node` tree.

Solution

Reload configuration in Java GUI or log off and log in again.

Symptom QCCR1A58168

Java GUI should start if TNS_ADMIN is in use without any customization

If you choose to use a different folder for storing the `tnsnames.ora` file, you may have problems when trying to run Java GUI.

Solution

1. Modify the `/etc/inetd.conf` file to start `opcuiwww` by using the `opcuiwww.sh` script:

```
# ito-e-gui    stream tcp nowait root /opt/OV/bin/OpC/opcuiwww.sh opcuiwww.sh
```

2. Edit the `/opt/OV/bin/OpC/opcuiwww.sh` file to export the `TNS_ADMIN` variable:

```
# export TNS_ADMIN=<alternate location>
```

3. Reconfigure `inetd` by entering the following:

```
# inetd -c
```

Symptom QCCR1A90795

SiteScope applications are not shown in Java GUI for any operator

The SiteScope integration uploads series of applications to the HPOM database, but these applications are not assigned by default to any operator, so these applications are not shown in the Java GUI.

Solution

Manually assign the SiteScope applications to the operators using the `opccfguser` command or Administration GUI. See the `opccfguser(1m)` man page for more information.

Symptom QCCR1A90656

Navigation Panel painting broken with JRE 6u10 and newer

With JRE 6u10 and newer, the Navigation Panel painting does not work correctly and CPU usage increases. This is a known problem with XOR painting in JRE 6.

Solution

Add the following attribute into Java UI startup script `ito_op.bat` and set it to true:

```
%START% .\jre6\bin\%JAVA% -Dsun.java2d.noddraw=true -XX:MaxPermSize=128m \  
-Xmx128m com.hp.ov.it.ui.OvEmbApplet
```

Symptom QCCR1A58386

OPC_MAX_JAVA_GUI parameter has no effect

The OPC_MAX_JAVA_GUI parameter does not limit the number of simultaneous Java UI connections when specified.

Solution

Use the DoS features of `opcuiwww` to limit number of simultaneous Java GUI connections

Symptom QXCR1000838847

Warning in System.txt when starting JGUI (“bad input character..”)

When starting Java GUI the warning appears in the System.txt on the server. Otherwise, JGUI works normally.

Solution

Ignore the error.

Symptom QCCR1A92236

After the reconnect, detached service graphs are automatically re-attached

After a reconnect in Java GUI, all detached service graphs are re-attached back to the main Java GUI application window.

Solution

Detach the service graphs manually after reconnect.

Symptom QCCR1A92514

Issues using navigation_panel

Popup menu on navigation panel cannot be used when doing reload configuration or log off and log in again.

Solution

Close the Java GUI and start it again.

Performance Agent version 4.70

Although it is not possible to deploy the Performance Agent (PA) 4.70 using the subagent deployment functionality of HPOM, you can manually install the PA 4.70 on any HPOM managed node.

To install the agent manually:

1. Install the depot `HPOvPADep-08.70.000-HPUX11.0-release.depot` on an UNIX system:

```
# swinstall -x enforce_scripts=false -x enforce_dependencies=false \  
-x autoselect_dependencies=false -x allow_incompatible=false -x match_target=false \  
-s /tmp/HPOvPADep-08.70.000-HPUX11.0-release.depot \*
```

Ignore the following errors in the `swagent.log` file

```
* Installing fileset "HPOvPADep.HPOVPADAX,r=8.70.000" (1 of 6).  
ERROR:  opcsareg failed with exit code 127  
* Installing fileset "HPOvPADep.HPOVPADHP,r=8.70.000" (2 of 6).  
ERROR:  opcsareg failed with exit code 127  
* Installing fileset "HPOvPADep.HPOVPADLX,r=8.70.000" (3 of 6).  
ERROR:  opcsareg failed with exit code 127  
* Installing fileset "HPOvPADep.HPOVPADSN,r=8.70.000" (4 of 6).  
ERROR:  opcsareg failed with exit code 127
```

```
* Installing fileset "HPOvPADep.HPOVPADWN,r=8.70.000" (5 of 6).
ERROR:   opcsareg failed with exit code 127
* Installing fileset "HPOvPADep.HPOVPAINT,r=8.70.000" (6 of 6).
```

Note that with HPOM 9.00, command `opcsareg` is longer available for subagent registration.

After running the command in step 1, you can find the PA tools uploaded into the “Tool Bank” in the group “OV Performance”. To use this tool group you must assign the group to operators.

2. Manually install the subagent:

```
# swinstall -s
/var/opt/OV/share/databases/subagent/VP_Perf_Agt/hp/ipf32/hpux1122/.C.04.70/ovpa_pkg.Z.B.11.31 \*
```

To install the PA agent on a remote machine, first use `ftp` to copy the depot to the remote node. Make sure you take the depot out of the correct OS directory, found under

```
/var/opt/OV/share/databases/subagent/VP_Perf_Agt/:
```

```
ms/intel/nt/C.04.70/ovpa_inst.exe
ms/x64/winxp/C.04.70/ovpa_inst.exe
ms/x86/winnt/C.04.70/ovpa_inst.exe
```

```
ibm/rs6000/aix/C.04.70/ovpa_pkg.Z
ibm/rs6000/aix5/C.04.70/ovpa_pkg.Z
```

```
hp/ia64/hp-ux11_32/C.04.70/ovpa_pkg.Z
hp/ia64/hp-ux11_32/C.04.70/ovpa_pkg.Z.B.11.31
hp/ipf32/hpux1122/C.04.70/ovpa_pkg.Z
hp/ipf32/hpux1122/C.04.70/ovpa_pkg.Z.B.11.31
hp/pa-risc/hp-ux11/C.04.70/ovpa_pkg.Z
hp/pa-risc/hp-ux11/C.04.70/ovpa_pkg.Z.B.11.23
hp/pa-risc/hp-ux11/C.04.70/ovpa_pkg.Z.B.11.31
hp/pa-risc/hpux1100/C.04.70/ovpa_pkg.Z
hp/pa-risc/hpux1100/C.04.70/ovpa_pkg.Z.B.11.23
hp/pa-risc/hpux1100/C.04.70/ovpa_pkg.Z.B.11.31
```

```
linux/intel/linux24/C.04.70/ovpa_pkg.Z
linux/intel/linux26/C.04.70/ovpa_pkg.Z
linux/ipf64/linux26/C.04.70/ovpa_pkg.Z
linux/x64/linux26/C.04.70/ovpa_pkg.Z
linux/x86/linux24/C.04.70/ovpa_pkg.Z
linux/x86/linux26/C.04.70/ovpa_pkg.Z
```

```
sun/sparc/solaris/C.04.70/ovpa_pkg.Z
sun/sparc/solaris7/C.04.70/ovpa_pkg.Z
sun/x86/solaris10/C.04.70/ovpa_pkg.Z
```

3. Check to make sure that fileset is installed correctly, as in this example on HPUX:

```
# swlist -l fileset MeasureWare

# MeasureWare          C.04.70.000  MeasureWare Software/UX
MeasureWare.MWA        C.04.70.000  MeasureWare Software files (IA)
MeasureWare.MWALIC-SERVER C.04.70.000  Perf Agent License files (IA)
MeasureWare.PERFDSI    C.04.70.000  HP PCS Data Source Integration (IA)
```

Documentation Errata

The following items are listed incorrectly in the documentation.

LOCATION	<i>HPOM Installation Guide for the Management Server</i> , Edition 1, page. 38
ERROR	nssize (ninode+1024), shmmni 512, shmseg 120
CORRECTION	nssize 35840, shmmni 4096, shmseg 512
LOCATION	<i>HPOM Installation Guide for the Management Server</i> , Edition 1, page. 45
ERROR	The X11.X11-RUN-CL-COM package must be installed.
CORRECTION	The CDE-English.CDE.Runtime.CDE-DTTERM package must be installed.

Local Language Support

The HPOM 9.00 is not yet fully localized. However, it can be used in multilingual environments.

Certified Encoding and Character Sets on HPOM Management Servers

Certified encoding and character sets need to be set for the HPOM management server and Oracle database host systems.

- Encoding HPOM Node Character Set: UTF-8
- Oracle Database Code Set NLS_LANG:AL32UTF8
- HP-UX Language Variable LANG:
 - English: C.utf8, en_US.utf8, en_GB.utf8
 - Spanish: es_ES.utf8
 - Japanese: ja_JP.utf8
 - Korean: ko_KR.utf8
 - Simplified Chinese: zh_CN.utf8

Other locales are also supported, for example, German and French. For information about supported character sets, refer to the *HPOM Administrator's Reference*. Note, that this HPOM release is not yet localized, but can be used in multilingual environments.

IMPORTANT UTF-8 is the only supported encoding supported by the HPOM database.

HP Software Support

You can visit the HP Software support web site at:

www.hp.com/go/hpsoftwaresupport

This web site provides contact information and details about the products, services, and support that HP Software offers.

HP Software online software support provides customer self-solve capabilities. It provides a fast and efficient way to access interactive technical support tools needed to manage your business. As a valued support customer, you can benefit by using the support site to:

- Search for knowledge documents of interest
- Submit and track support cases and enhancement requests
- Download software patches
- Manage support contracts
- Look up HP support contacts
- Review information about available services
- Enter into discussions with other software customers
- Research and register for software training

Most of the support areas require that you register as an HP Passport user and sign in. Many also require an active support contract. To find more information about support access levels, go to the following URL:

http://support.openview.hp.com/new_access_levels.jsp

To register for an HP Passport ID, go to the following URL:

<http://h20229.www2.hp.com/passport-registration.html>

Legal Notices

Warranty.

Hewlett-Packard makes no warranty of any kind with regard to this document, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Hewlett-Packard shall not be held liable for errors contained herein or direct, indirect, special, incidental or consequential damages in connection with the furnishing, performance, or use of this material.

A copy of the specific warranty terms applicable to your Hewlett-Packard product can be obtained from your local Sales and Service Office.

Restricted Rights Legend.

Use, duplication or disclosure by the U.S. Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause in DFARS 252.227-7013.

Hewlett-Packard Company
United States of America

Rights for non-DOD U.S. Government Departments and Agencies are as set forth in FAR 52.227-19(c)(1,2).

Copyright Notices.

©Copyright 2009 Hewlett-Packard Development Company, L.P.

No part of this document may be copied, reproduced, or translated to another language without the prior written consent of Hewlett-Packard Company. The information contained in this material is subject to change without notice.

Trademark Notices.

Java™ is a US trademark of Sun Microsystems, Inc.

Microsoft®, Windows®, and Windows NT® are U.S. registered trademarks of Microsoft Corporation.

Oracle® is a registered trademark of Oracle Corporation and its affiliates.

UNIX® is a registered trademark of the Open Group.

Acknowledgements

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>).

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com).

This product includes software written by Info-ZIP (<http://www.info-zip.org/license.html>).

This product includes software written by Tim Hudson (tjh@cryptsoft.com).

This product includes software developed by the Apache Software Foundation (<http://www.apache.org/>).

This product includes lsof © Copyright 2002 Purdue Research Foundation, West Lafayette, Indiana 47907.

This product includes software developed by The TM4J Project (<http://sourceforge.net/projects/tm4j>).

This product includes software developed by VM Systems, Inc. (<http://www.vmsystemsinc.com/>).

This product includes software developed by the MX4J project (<http://mx4j.sourceforge.net>).

This product includes DOM4J, Copyright 2001-2005 © MetaStuff, Ltd. All Rights Reserved.

This product includes ICU4C Copyright © 1995-2006 International Business Machines Corporation and others.

This product includes ICU4J Copyright © 1995-2006 International Business Machines Corporation and others.

NOTICE OF RESTRICTED RIGHTS: Programs delivered subject to the DOD FAR Supplement are 'commercial computer software' and use, duplication, and disclosure of the programs, including documentation, shall be subject to the licensing restrictions set forth in the applicable Oracle license agreement. Otherwise, programs delivered subject to the Federal Acquisition Regulations are 'restricted computer software' and use, duplication, and disclosure of the programs, including documentation, shall be subject to the restrictions in FAR 52.227-19, Commercial Computer Software-Restricted Rights (June 1987). Oracle Corporation, 500 Oracle Parkway, Redwood City, CA 94065.

Export and Cryptography Notice.

This software may not be exported, re-exported, transferred or downloaded to or within (or to a national resident of) countries under U.S. economic embargo including the following countries:

Cuba, Iran, Iraq, Libya, North Korea, Sudan and Syria

This list is subject to change.

Legal Notices

This software may not be exported, re-exported, transferred or downloaded to persons or entities listed on the U.S. Department of Commerce Denied Persons List, Entity List of proliferation concern or on any U.S. Treasury Department Designated Nationals exclusion list, or to parties directly or indirectly involved in the development or production of nuclear, chemical, biological weapons or in missile technology programs as specified in the U.S. Export Administration Regulations (15 CFR 744).

In addition, be advised that this software contains cryptography and is subject to U.S. cryptography export regulations.